

PROJECT DESCRIPTION

I. GENERAL

This portion of the project involves the installation of a new traffic controlsignal at the intersection of E. Ridgeville Blvd. and Ridgeside Drive/Mt. Airy Shopping Center Entr. in Carol County, Maryland. E. Ridgeville Blvd. is considered to run in an east/west direction.

II. INTERSECTION OPERATION

The intersection is to operate in a NEMA six (6) phase, full-traffic-actuated mode. There will be exclusive/permissive left turn phases for both the east and westbound movements of E. Ridgeville Blvd. The E. Ridgeville Blvd. through movements will operate concurrently. The Ridgeside Drive/Mt. Airy Shopping Center Entr. movements will operate concurrently.

An eight phase, full-traffic-actuated, solid state digital controller with intersection monitor and harness, battery back-up, and two 4-channel rack mounted time delay output loop detector amplifiers housed in a base mounted cabinet are to be installed at this location.

CONTACT LIST

The contact persons for District #7 are as follows:

Mr. Robert Fisher
District Engineer
301-624-8101

Mr. John Concannon
Assistant District Engineer - Traffic
301-624-8101

Mr. James Buckalew
Assistant District Engineer - Utility
301-624-8101

Mr. Leon Kerns
Assistant District Engineer - Maintenance
301-624-8101

Mr. Richard L. Daff
Chief, Traffic Operations Division
410-787-7630

The Power Company Representative is:
Allegany Power Company
Mr. Thomas G. Hull
P.O. Box 488
Frederick, Maryland 21701-0488
301-694-4425

Phase Chart

	1	2	3	4	5	6	7	8	9	10	
Phase 1 & 5											
1 & 5 Change to Phase 1 & 6 or Phase 2 & 5 or Phase 2 & 6											
Phase 1 & 6											
1 Change											
Phase 2 & 5											
5 Change											
Phase 2 & 6											
2 & 6 Change											
Phase 4 & 8											
4 & 8 Change											
Flashing Operation											

EQUIPMENT LIST

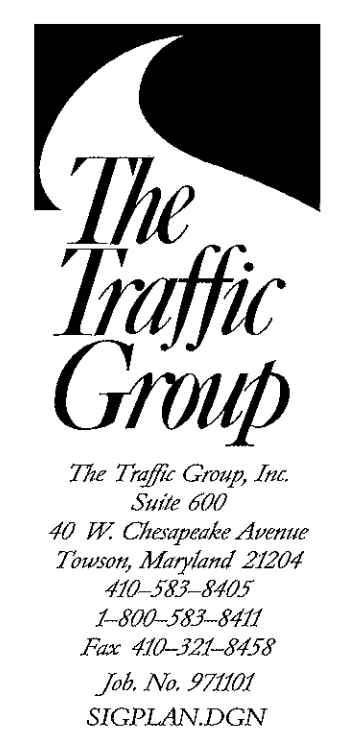
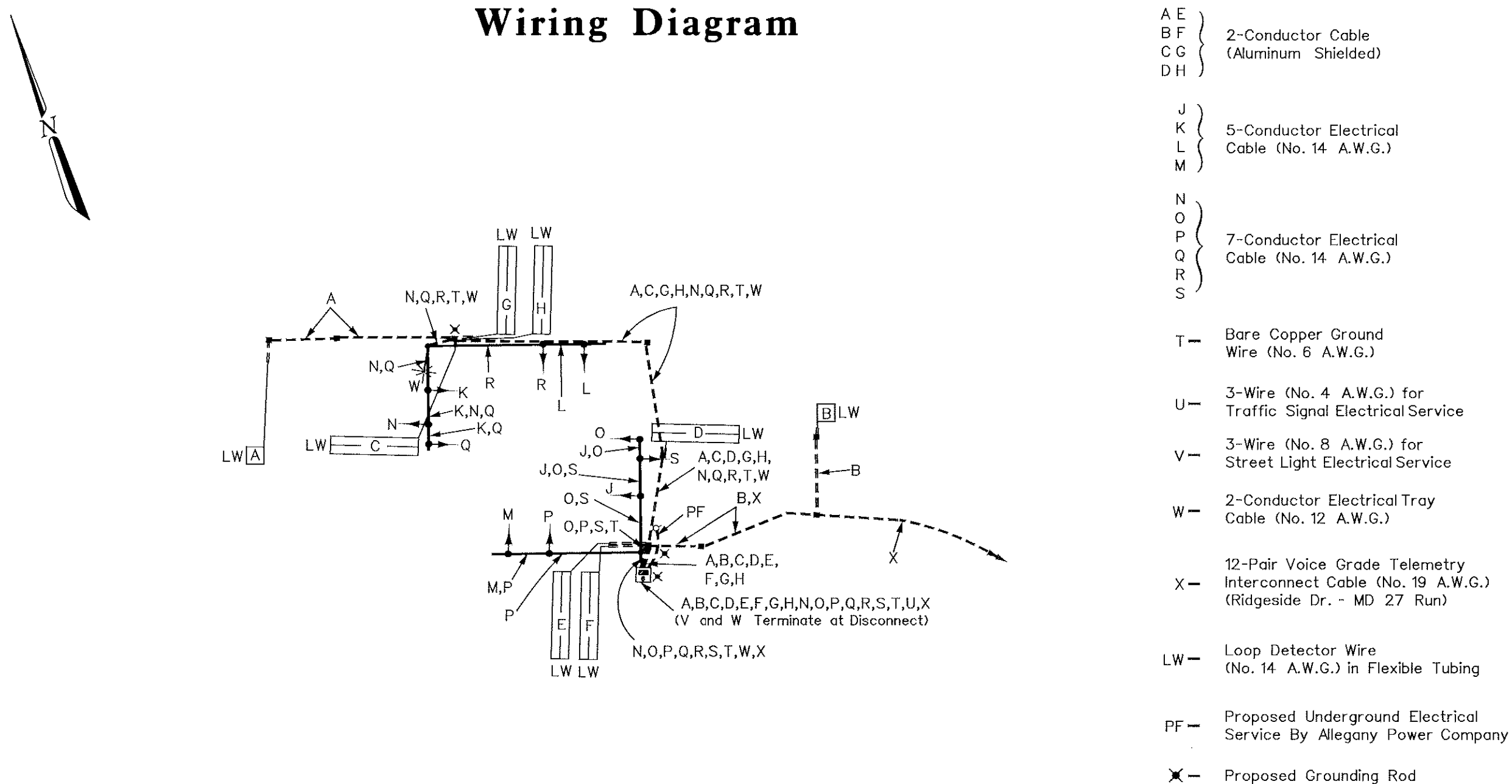
A. Approved S.H.A. equipment to be purchased by the Developer and installed by the Contractor. All equipment in this list shall have catalog cuts submitted for approval prior to installation.


Quantity	Units	Specification Section	Description
1	EA	818	27 ft. steel twin mast arm pole with two 50 ft. mast arms [Note: four 1-3/4 in. x 90 in. anchor bolts].
1	EA	818	27 ft. steel twin mast arm pole with 50 ft. and 60 ft. mast arms [Note: four 2 in. x 90 in. anchor bolts].
1	EA	816	Standard S.H.A. traffic signal controller, base mounted cabinet, and two 4-channel rack mounted loop detector amplifiers [Note: Controller and cabinet shall be supplied by Econolite and delivered to the S.H.A. signal shop for wiring and testing. Contact Mr. Ed Rodenhizer (410) 787-7650].
6	EA	814	12 in., one-way, three section (R,Y,G) adjustable traffic signal head with mast arm mounting hardware and tunnel visors.
2	EA	814	12 in., one-way, five section (R,Y,YA,G,G,A) adjustable traffic signal head with mast arm mounting hardware and tunnel visors.
2	EA	814	12 in./8 in., one-way, five section (12 in. YA,G,A/ 8 in. R,Y,G) adjustable traffic signal head mast arm mounting hardware and tunnel visors.
2	EA	813	36 in. x 42 in. R 10-12 sign with mast arm mounting hardware.
2	EA	813	30 in. x 36 in. R 3-5(L) sign with mast arm mounting hardware.
2	EA	813	30 in. x 36 in. R 3-5(R) sign with mast arm mounting hardware.
1	EA	813	30 in. x 30 in. R 10-1b sign with mast arm mounting hardware.
4	EA	813	36 in. x 36 in. W 3-3 "NEW" sign for ground mounting.
1	EA	813	16 in. x Var. D 3-2 (Dual Face) sign with mast arm mounting hardware.
1	EA	806	10 ft. luminaire arm.
1	EA	806	250 watt HPS luminaire.

B. Equipment to be furnished and installed by the Contractor. All equipment in this list shall have catalog cuts submitted for approval prior to installation.

Quantity	Units	Specification Section	Description
Lump Sum	LS	108	Mobilization.
Lump Sum	LS	104	Maintenance of traffic.
3	CY	205	Test pit excavation.
9	EA	811	Handhole.
810	LF	815	Sawcut for signal loop detector.
3130	LF	810	Loop detector wire (No. 14 A.W.G.) encased in flexible tubing.
1250	LF	810	2-conductor (aluminum shielded) electrical cable (No. 14 A.W.G.).
240	LF	810	2-conductor tray cable (No. 12 A.W.G.).
120	LF	810	5-conductor electrical cable (No. 14 A.W.G.).
1100	LF	810	7-conductor electrical cable (No. 14 A.W.G.).
25	LF	810	3-wire (No. 4 A.W.G.) electrical cable.
25	LF	810	3-wire (No. 8 A.W.G.) electrical cable.
1060	LF	810	12-pair voice grade (jelly filled) telemetry interconnect cable (No. 19 A.W.G.).
220	LF	804	Bare copper stranded ground wire (No. 6 A.W.G.).
40	LF	805	1 in. liquid tight flexible non-metallic conduit for loop detector sleeve.
25	LF	805	1 in. galvanized steel conduit for loop detector sleeve.
180	LF	805	2 in. polyvinyl chloride [Schedule 80] electrical conduit - trenched.
35	LF	805	2 in. polyvinyl chloride [Schedule 80] electrical conduit - pushed.
30	LF	805	2 in. polyvinyl chloride [Schedule 80] electrical conduit - slotted in roadway.
470	LF	805	3 in. polyvinyl chloride [Schedule 80] electrical conduit - trenched.
35	LF	805	3 in. polyvinyl chloride [Schedule 80] electrical conduit - pushed.
85	LF	805	3 in. polyvinyl chloride [Schedule 80] electrical conduit - slotted in roadway.
30	LF	805	4 in. polyvinyl chloride [Schedule 80] electrical conduit - trenched.
8.55	CY	801	Concrete foundation for traffic signal equipment.
3	EA	804	Ground rod - 3/4 in. diameter x 10 ft. length.
1	EA	807	Control and distribution equipment (120/240 V, one phase, three wire system) for a type B-S underground electrical service.
125	EA	550	24 in. wide HAPPTPM - white for stop line.
182	LF	812	4 in. x 6 in. wood sign support.
2	EA	---	Cut, clean, and cap mast arm.
1	EA	---	Cut, clean and cap mast arm pole.
2	EA	---	Remove existing sign.
Lump Sum	LS	---	As-built for S.H.A. Con CADDJ.

Wiring Diagram





MDOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION
(General Information)
**E. Ridgeville Blvd. at Ridgeside Drive/
Mt. Airy Shopping Center Entr.**

DATE: April 22, 1999
DRAWN BY: F.J.H./J.E.S.
CHK. BY: N/A
SCALE: N/A

F.A.P. NO. N/A
S.H.A. NO. BW996M82
COUNTY: CARROLL

LOG MILE: *
PLAN SHEET NO.:
SHEET NO. 2 of 4